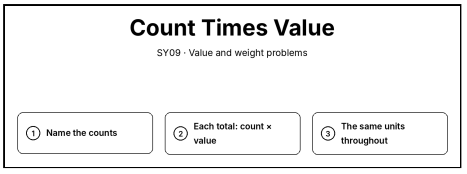
Count Times Value: teacher script

SY09-V1 · SY09 Value and weight problems · teachers only. Without a screen, read each Say line and draw each Draw step on the board. About 72 seconds as a video.

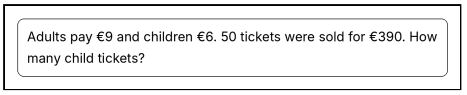
01



Say. Count times value. Name the counts. Each total is count times value, added over every kind, in the same units throughout.

Draw. Write the title “Count Times Value” and the steps: 1. Name the counts; 2. Each total: count × value; 3. The same units throughout.

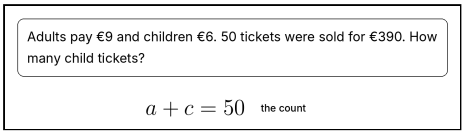
02



Say. Adults pay nine euros and children six. Fifty tickets were sold for three hundred and ninety euros. How many child tickets?

Draw. Clear the board. Write “Adults pay €9 and children €6. 50 tickets were sold for €390. How many child tickets?” in a box at the top.

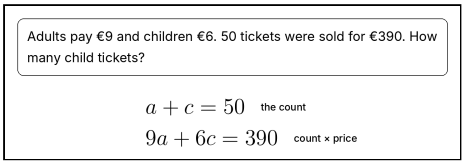
03



Say. Let a and c be the numbers of adult and child tickets. Fifty tickets: a + c = 50.

Draw. Write a + c = 50 on the next line. Beside it, write “the count”.

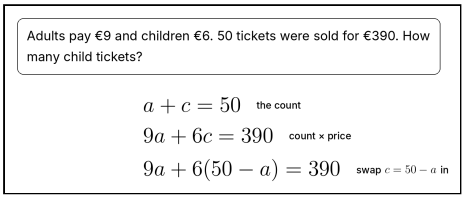
04



Say. The money: nine for each adult and six for each child. 9a + 6c = 390.

Draw. Write 9a + 6c = 390 on the next line. Beside it, write “count × price”.

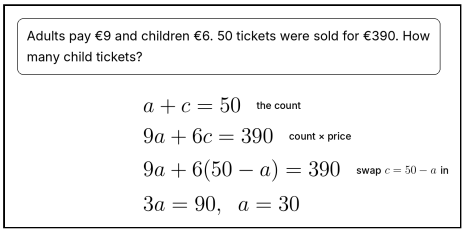
05



Say. Swap c = 50 − a in.

Draw. Write 9a + 6(50 − a) = 390 on the next line. Beside it, write “swap c = 50 − a in”.

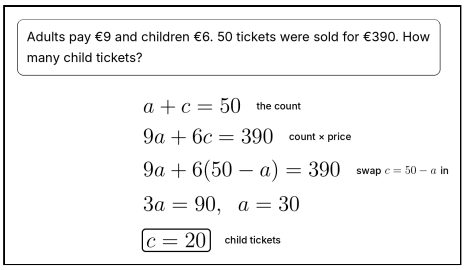
06



Say. So 3a = 90, and a = 30.

Draw. Write 3a = 90, a = 30 on the next line.

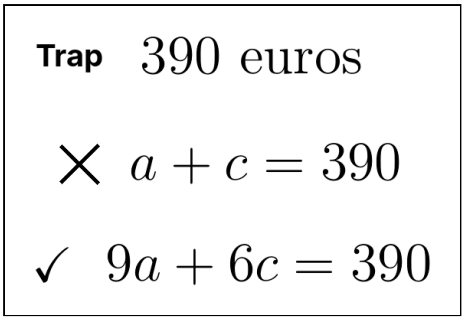
07



Say. The answer: c = 20 child tickets. Check: two hundred and seventy plus one hundred and twenty is three hundred and ninety.

Draw. Write c = 20 and box it on the next line. Beside it, write “child tickets”.

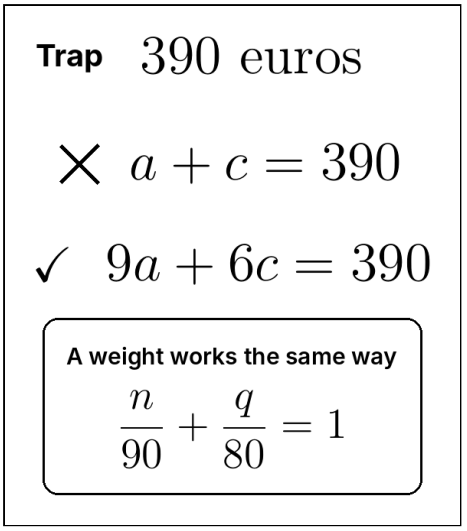
08



Say. Watch for the trap: adding counts to money. Money is count times price, for each kind.

Draw. Clear the board. Write “Trap” and 390 euros. Below, write a + c = 390 and cross it out ×. Then write 9a + 6c = 390 with a tick ✓.

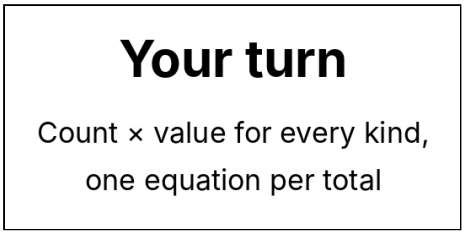
09



Say. A weight works the same way. If ninety nickels weigh a pound, one nickel weighs one ninetieth of a pound, and n nickels weigh n/90.

Draw. Write the rule in a box: n/90 + q/80 = 1.

10



Say. Now it is your turn. Count times value for every kind, and one equation per total.

Draw. Point to today’s activity: Count × value for every kind, one equation per total